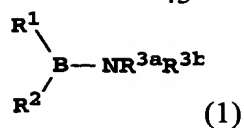


What is claimed is:

1. A phosphorescent electroluminescent device comprising a light-emitting layer containing a host material and a phosphorescent light-emitting material wherein the host material comprises a boron compound containing at least one boron-nitrogen bond.
2. An electroluminescent device as in claim 1 wherein the host material comprises a trisaminoborane material.
3. An electroluminescent device as in claim 2 wherein one of the amines of the trisaminoborane material is bonded to an aromatic ring group.
4. An electroluminescent device as in claim 2 wherein the three amines of the trisaminoborane material are each bonded to an independently selected aromatic ring group.
5. An electroluminescent device as in claim 2 wherein the trisaminoborane comprises an azolyl, azinyl, or arylamine group.
6. An electroluminescent device as in claim 2 wherein the trisaminoborane comprises an aminophenyl, carbazole, indole, or an aminonaphthyl group.
7. An electroluminescent device as in claim 2 wherein all three amino moieties are the same.
8. The electroluminescent device as in claim 1 wherein the a boron compound is represented by formula (1):



wherein:

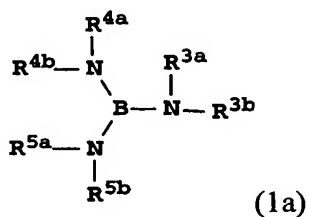
R^1 , R^2 , R^{3a} , and R^{3b} are independently selected substituents, provided that two substituents may join to form a ring.

9. The device of claim 8 wherein at least one of R^{3a} and R^{3b} represents an aromatic ring group.

10. The device of claim 8 wherein R^1 and R^2 each represent an independently selected aromatic ring group.

11. The device of claim 8 wherein R^1 represents a 2,6-disubstituted benzene group.

12. The electroluminescent device of claim 1 wherein the host material is represented by formula 1a,



wherein:

R^{3a} , R^{3b} , R^{4a} , R^{4b} , R^{5a} , and R^{5b} each represent an independently selected aliphatic group or aromatic group provided at least one of R^{3a} , R^{3b} , R^{4a} , R^{4b} , R^{5a} , and R^{5b} is an aromatic group and provided that two substituents may join to form a ring.

13. The device of claim 12 wherein R^{3a} , R^{3b} , R^{4a} , R^{4b} , R^{5a} , and R^{5b} each represent independently selected aromatic groups, provided that two groups may join to form a ring.

14. The device of claim 12 wherein R^{3a} and R^{3b} form a carbazole ring group.

15. The device of claim 12 wherein R^{3a} and R^{3b} form an indole ring group.

16. The device of claim 1 wherein the host material is present in the light emitting layer at 25 wt% or greater.

17. The device of claim 1 wherein the host material is present in the light emitting layer at 50 wt% or greater.

18. The device of claim 1 wherein the host material is present in the light emitting layer at 80 wt% or greater.

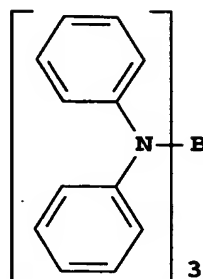
19. The device of claim 1 wherein phosphorescent material emits blue light.

20. The device of claim 1 wherein the phosphorescent material emits green light.

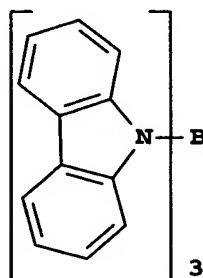
21. The device of claim 1 wherein the phosphorescent material emits red light.

22. The device of claim 1 wherein the host material is selected from: structures Inv-1 through Inv-21:

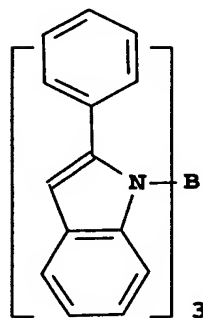
Inv-1



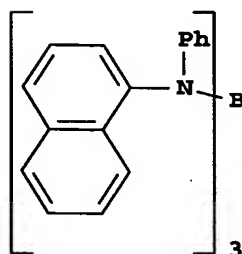
Inv-2



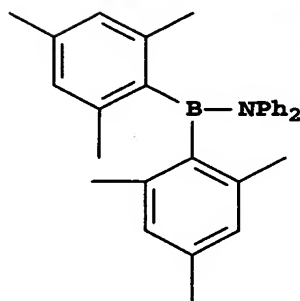
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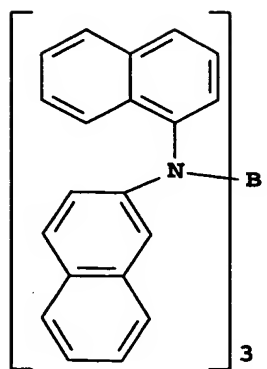
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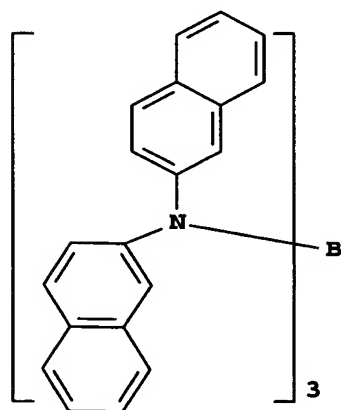
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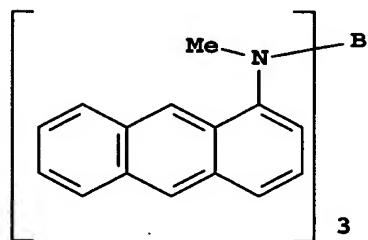
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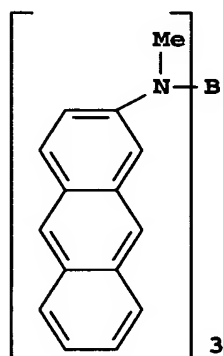
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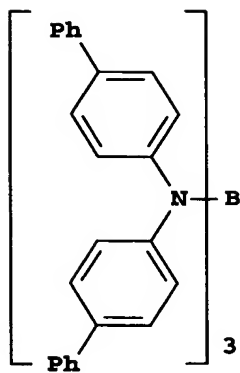
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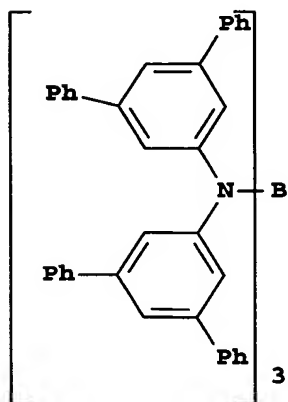
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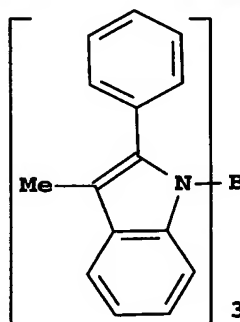
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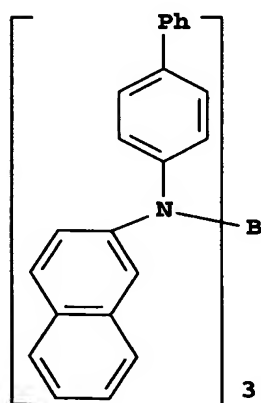
Inv-11



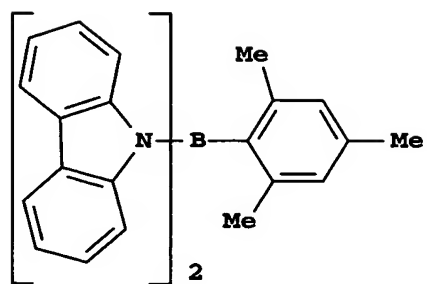
Inv-12



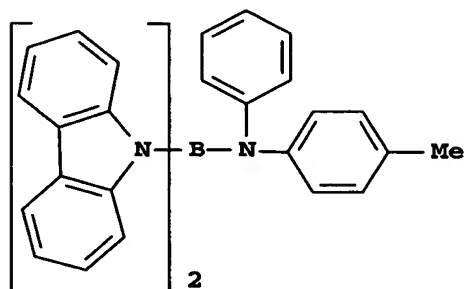
Inv-13



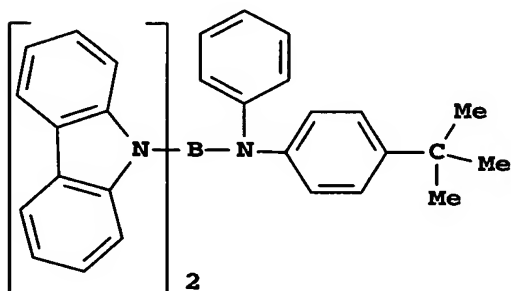
Inv-14



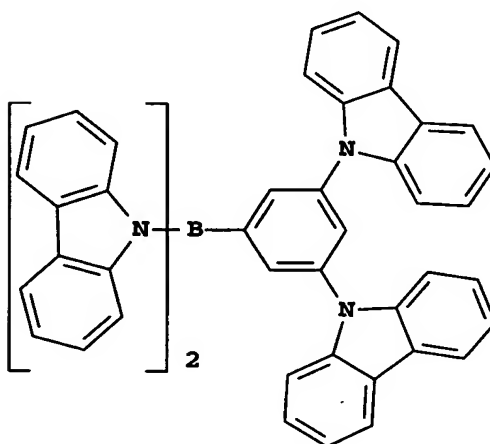
Inv-15



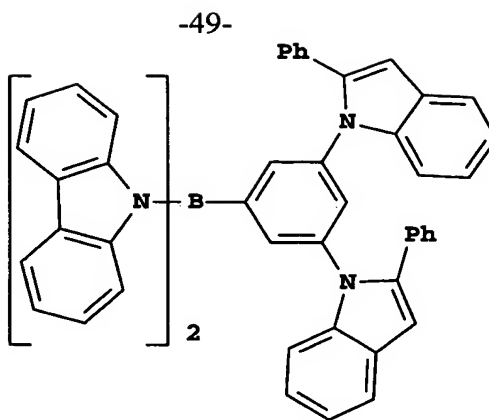
Inv-16



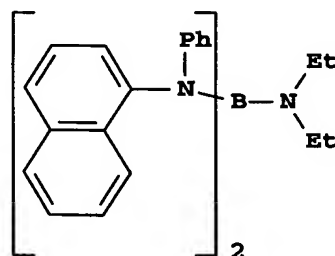
Inv-17



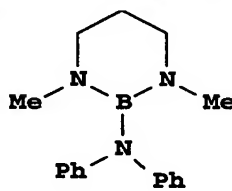
Inv-18



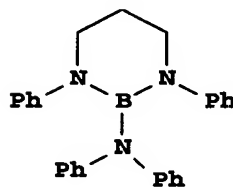
Inv-19



Inv-20



Inv-21



23. The device of claim 1 wherein the light-emitting material is part of a polymer.

24. The device of claim 1 wherein the host material is represented by formula (1), wherein formula (1) is part of a polymer.

25. The device of claim 1 including a white light emitter.

26. The device of claim 1 including a light filtering means.

27. The device of claim 1 including a fluorescent emitting material.
28. A display comprising the OLED device of claim 1.
29. An area lighting device comprising the OLED device of claim 1.
30. A process for emitting light comprising applying a potential across the device of claim 1.